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Inaugural Dissertation,

On the Influenza as it appeared in the
State of Delaware in 1807;

with some observations on the nature
of the disease.

Submitted to the examinations

of

John McDowell, L.L.D., Provost,
the Trustees, & Medical Professors

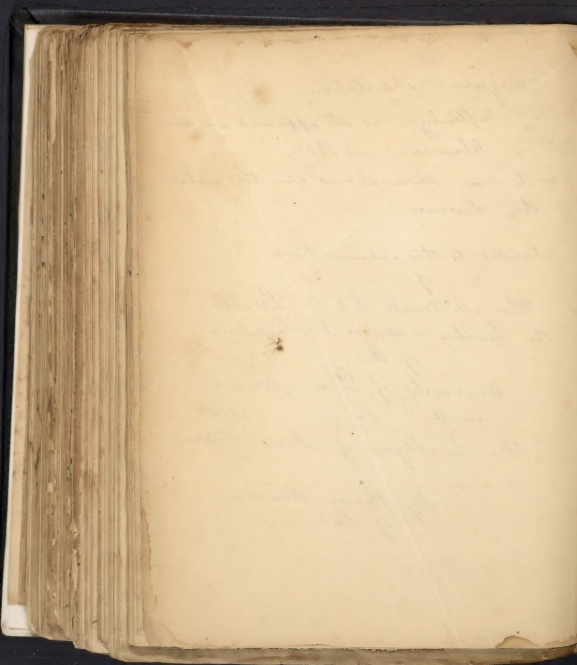
of the

University of Pennsylvania,

on the day of 1808.

For the Degree of Doctor of Medicine.

By Henry Martin
of Delaware

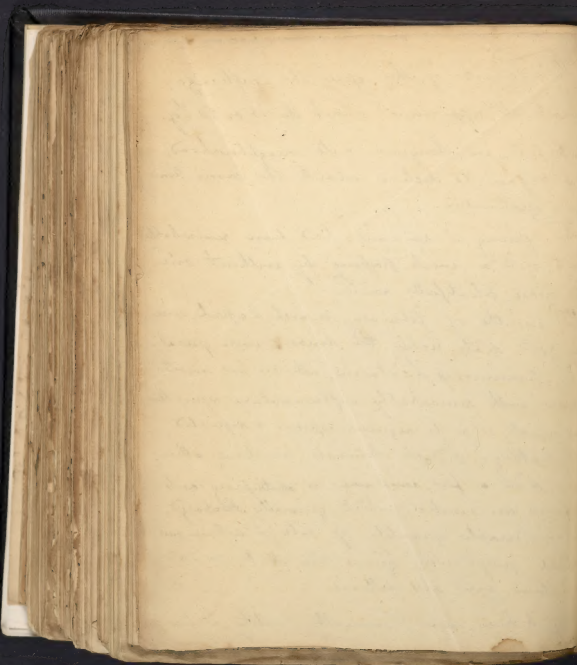


The subjects of this essay the Influenza, made its appearance about the 15 or 20th of August, in Smyrna & its neighbourhood, & began to decline about the same time in September.

The spring, & summer, had been remarkably wet, not a week passing by without one or more plentiful rains.

The months of february, march, & april, were a good deal sickly; the diseases were generally, pneumoniae, Catarrhs, attended in most cases with remarkably inflammatory symptoms, so much so as to require copious & repeated bloodletting - a sick stomach sometimes attended, & in a few cases was so disturbing as to require an emetic, which generally discharged a considerable quantity of bile, & when mercurial purges were given the stools produced by them were also bilious.

May, & June, were unusually healthy, a few



cases of fever occurring tho, which were generally of the inflammatory type, & in most instances attended with local determinations to the chest; in these cases the bilious symptoms also attended.

About the 13th of May, I was called to a young woman, who I found labouring under an inflammatory fever, which had been brought on by getting her feet wet; she had no cough, & complained of no pain, except in her head; I took near a pint of blood from her, & left a cathartic for her to take; the next day a pain in the side came on, with a troublesome cough, for which I prescribed a blister to be applied to the pained part. The third day I saw her the second time, bled her again, & once on the succeeding day; the fifth day from the time I first saw her, I saw her again, found her with very little cough, & her pulse nearly natural. Her skin days were now extremely yellow attended with nausea, & great inclination to vomit; I

immediately gave her an emetic, which discharged a considerable quantity of bile; during her illness, she had taken two or three cathartics, which had produced bilious stools. In a few days she recovered.

From the circumstance of bilious symptoms uniformly attending the inflammatory ears which occurred during the spring months, I expected that remitting, & intermittent fevers, would be very prevalent the ensuing fall, particularly if August, & September should be dry; but this was not the case, for the season throughout from April untill the latter end of September, was remarkably wet, & from this circumstance intermittent, & remitting fevers were very rare.

Might not the absence of autumnal fevers, have been owing in part also to the universality of the Influenza? Agreeable to the third law of epidemics, as taught by Professor Rush, viz that "no two epidemic fevers of different forces, brought

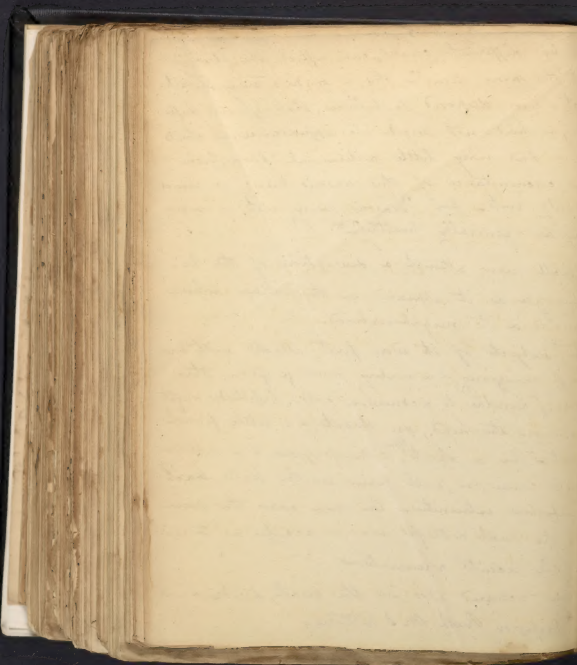
on by different causes, can affect the blood vessels at the same time? this is indeed very probable. Yet I am disposed to believe, that if the Influenza had not made its appearance, we should have had very little autumnal fever, from the circumstance of the season's being so remarkably wet - for seasons very wet or very dry are generally healthy?*

I shall now attempt a description of the Influenza, as it appeared in the village where I resided, & its neighbourhood.

The subjects of it were first attacked with hoarseness, sneezing, & a watery discharge from the nose; (similar to a common cold) Lapsitude, slight pain in the head, sore throat, & a little feverish habit. In a short ^{time} chilliness, fever, & a distressing cough came on, with pain in the head, back & superior extremities. - In some cases the pain in the back, & thighs, was so acute as to resemble acute rheumatism.

Pain occurred also in the breast, & sides; & in

* Professor Rush M.D. lectures.



two or three cases which came under my notice, the patients complained of distressing pain in the region of the scrobiculus cordis, extending round on the right side to the back, in the course of the junction of the diaphragm with the false ribs.

In two or three cases that I heard of, the disease was attended with a pain in the ear.

The eyes were red, small, watery.

The pain in the head was variously situated in different cases, but was generally confined to the neighbourhood of the frontal sinus.

The fever generally continued two or three days, and afterward gradually declined in the course of a remittent. In most cases, the patients being charact^r of fever in the afternoon, a crisis took place in the morning.

The cough, however, continued longer, after the patients were in other respects perfectly well.

The skin was generally dry, but in a few cases the disease was attended with profuse perspiration.



In a few cases nausea, a vomiting attended the disease, but this was by no means common.

Where the disease was so violent as to confine the patient to bed, the bowels were generally affected with costiveness, unless a few were cases diarrhoea attended.

The pulse in almost every case indicated the presence of inflammatory disease, it is therefore corresponded with the violence of the disease.

It was told by an old physician of the place where I was, that the disease produced miscarriage, & abortion, in two or three cases of pregnant women that came under his care.

A great many persons from imprudent exposure to night air fatigue, or while labouring under a slight attack of influenza, were seized with most violent pneumonia.

by Professor Baur's that epidemics generally

* Dr. Baur takes notice of a case of this kind in his treatise on influenza.



It blended itself with the case of intermittent, & remitting fever, & sometimes also that were present at the time of the commencement.

A more fatal & more common among old people, persons whose systems were previously debilitated by other disease, or in the reaction of violent spirits & persons predisposed to pulmonary complaints.

A middle aged gentleman of Hilmington told me that the influenza had nearly cured him of a chronic complaint of this kind. On the decline of influenza, cases of autumnal fever became more common, & those who had had the influenza most severe were generally attacked with intermittent fever soon after it.

Dr. Sidenham tells us & we are also taught by Sydenham & others that epidemics generally

* Dr. Keen takes notice of a case of this kind in his treatise on influenza.



come on with ⁹ greater force, & become milder
afterwards - This was precisely the case with
the influence as noticed by me, for in the
beginning it required bleeding, & other antiphlo-
gistic remedies to subdue it; whereas in the
close the pediluvium, a plentiful draught
of warm sap, or lemon tea, to excite a per-
spiration, were all that was necessary.

Cure. - On the treatment of this disease,
I was governed entirely by the state of the
system - When the inflammatory action
was considerable, I bled the patient & gave him
a cathartic; sometimes calomel & jalap but
I found greater advantage from cream of
tartar, or glauber salts than from any other
cathartic medicine that I used - with these
remedies were used, febrifuge powders of nitre,
tartar emetic, & calomel - & the debilitated drinks
& the antiphlogistic regimen.
When the inflammatory symptoms were not



insufficiently obtained by one bleeding, the operation was repeated, but there was few cases that required more than one or two bleedings, except in those where from imprudent exposure, fatigue & symptoms of pneumonia were induced. These cases of pneumonia were unusually violent, & required copious, & repeated bleedings to subdue them.

Altho the epidemic was attended with a very inflammatory diathesis in some cases, yet in a majority of cases bleeding was not necessary; in such cases I generally gave a calomel purge, cream tartar or glauber salts, a moderate use of sweating remedies, with the antiphlogistic regimen.

Sweating was found peculiarly useful in almost every case, particularly when there was much pain. The pains in the back, limbs &c were always relieved, & in some cases entirely removed, in a few hours after perspiration.



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ration had been excited.

The sudorifics that were used were the piddle.
vium, & plentiful draughts of any mild dis-
cuss drink sage tea was most common-
ly used; & was a weak decoction of the Eupate.
vium perfoliatum in a few cases, & found
that perspiration could be excited more certainly
by it, than by any of the teas that are
in common use for this purpose.

When a plentiful perspiration could not be
excited by sudorifics, a tepid drink alone,
I gave at the same time small doses of
colic tartar, or antimonial wine.

The cough was not managed by the use of
anodyne medicines; the paracoric virus of
the above was generally used for this purpose.
I found the following formula a more con-
venient one in the management of the
cough

℞ Common Paracoric Virus - ℥j
sine glycer. & ly Arab. an - ℥j
vis. Antim. fort LXXX mil C
aqua simp. - ℥j
M. each qua hora 2-3 times ℥jx



on the eve of this the cough was generally
always a perspiration induced.

Reminds of persons had the disease so slight
as to do nothing for it.

Is the Influenza a contagious disease?

Dr Cullen, & the older authors suppose that
it was.

Cullen in his Nosology makes two species of
catarrh: one he supposes is produced by cold, &
the other by contagion.

In his first lines, after speaking of the first
species of catarrh, or that produced by cold, he
has the following word-paragraph.

"The mention of this last lead me to observe
that there are two species of catarrh as I have
marked in my Synopsis of Nosology. One of them
as I suppose is produced by cold alone as has
been explained above, & the other seems mani-
festly to be produced by a specific contagion.



of such contagious catarrhs I have pointed
out in the Synopsis many instances occurring
from the 4th Century down to the present day.
In all these instances, the phenomena have been
much the same; & the disease has been always
particularly remarkable in this, that it has
run the most widely, & generally spreading epi-
demic known.*

By a contagious disease (agreeable to the modern
acceptation of the term) is meant a disease,
in which a matter is produced by the living
body, which is capable of producing the disease
in another person either through the medium
of the air, or by contact.†

Now I suppose that in influenza no such
matter is produced, but that the disease is
produced by some invisible matter that floats
in the atmosphere, and of which we don't

* Cullen's First lines.

† Professor Aikin M.D. lectures.



understand the nature? * And in every case
is produced entirely independent of any other
like contagion.

My objections to its being contagious are the
following.

1. It spreads with much more rapidly
than any other epidemic or contagious
or noncontagious disease.

The measles, & small pox (decidedly contagious
diseases) do not spread with one fiftieth
part the rapidity of the influenza.

"In the year 1782 the influenza appeared
at London between the 12th & 18th, at Oxford in
the third week, & at Edinburgh on the 20th
day of May."

2 Because it never can be traced to any
particular source, but generally begins at three
or three different places at the same time.

And 3^{rdly} because persons will be taken
with it, who have had no communication.

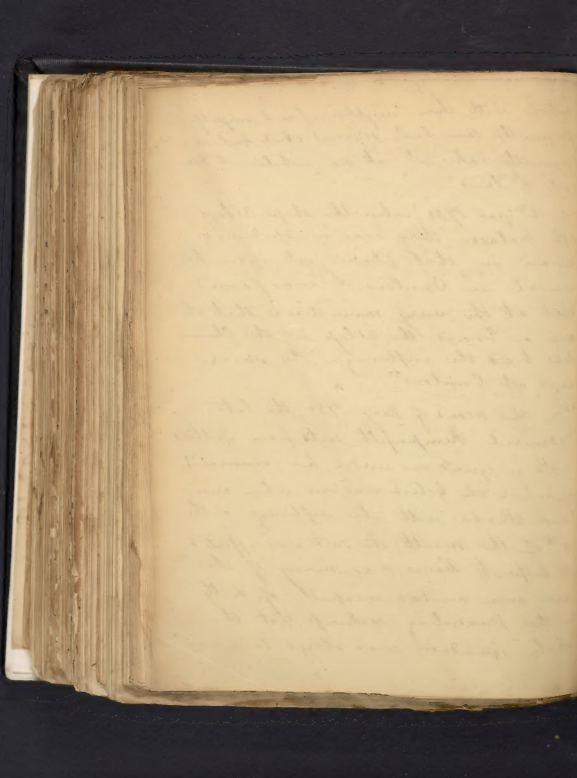
* Infopos. Linn. M. & Lecture.



-cations with their neighbours, (as I myself frequently saw last season) and sailors frequently take it at sea while it prevails on land -

"On the year 1781, when the ship *Atlap* left Malacca, there was no epidemic disease in that place; yet upon her arrival in Canton, it was found that at the very same time that the crew on board the *Atlap* in the China Sea had the influenza, the disease raged at Canton?"

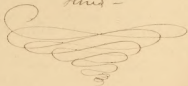
"On the second of May 1782, the late admiral *Kempenfelt* sailed from Spithead with a squadron under his command, of which the *Goliath* was one, whose crew was attacked with the influenza, on the 29th of the month; the rest were affected at different times; & so many of the men were rendered incapable of duty by this prevailing sickness, that the whole squadron was obliged to return



into port about the second week in June,
not having had communication with any
shore, & having cruized solely between Puerto
& the Lizard - *

Many other quotations might be brought
forward in favour of the noncontagious
nature of this disease, but these are
thought sufficient.

Finis -



* Lond. Med. Trans. Vol 3. Page 61 -

